

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP99/03731

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁶ H05K1/18, H05K1/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl⁶ H05K1/18, H05K1/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1926-1996 Toroku Jitsuyo Shinan Koho 1994-1999
Kokai Jitsuyo Shinan Koho 1971-1999 Jitsuyo Shinan Toroku Koho 1996-1999

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP, 2-146792, A (NEC Corp.), 5 June, 1990 (05. 06. 90), Fig. 2 (Family: none)	1-12
Y	JP, 6-85154, A (Hitachi, Ltd.), 25 March, 1994 (25. 03. 94), Claim 3 ; Figs. 6 to 9 & US, 5402318, A	1-12
Y	JP, 10-290054, A (Sony Corp.), 27 October, 1998 (27. 10. 98), Figs. 1 to 3, 8, 9 (Family: none)	1-12
Y	JP, 11-7348, A (NEC Corp.), 12 January, 1999 (12. 01. 99), Fig. 1 (Family: none)	6
Y	JP, 64-44640, U (Yaskawa Electric Mfg. Co., Ltd.), 16 March, 1989 (16. 03. 89), Drawings (Family: none)	11

☒ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
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"&" document member of the same patent family

Date of the actual completion of the international search
6 October, 1999 (06. 10. 99)

Date of mailing of the international search report
2 November, 1999 (02. 11. 99)

Name and mailing address of the ISA/
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP, 1-125571, U (Goyo Denshi Kogyo K.K.), 28 August, 1989 (28. 08. 89), Fig. 3 (Family: none)	11
A	JP, 10-256423, A (Seiko Epson Corp.), 25 September, 1998 (25. 09. 98) (Family: none)	1-12
A	JP, 6-29421, A (Ibiden Co., Ltd.), 4 February, 1994 (04. 02. 94) (Family: none)	1-12
A	JP, 2-186694, A (Hitachi, Ltd.), 20 July, 1990 (20. 07. 90) & US, 5371653, A	1-12
A	DE, 3134385, A (Siemens AG), 10 March, 1983 (10. 03. 83) (Family: none)	1-12
A	US, 5475261, A (Fujitsu Limited), 12 December, 1995 (12. 12. 95) & WO, 9205583, A & EP, 504411, A	1-12
A	US, 5309324, A (Jorge M. Hernandez), 3 May, 1994 (03. 05. 94) (Family: none)	1-12